

# A Psycho-Cultural Approach to Video Games

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## CGSA Paper Proposal: Regular Submission

Theme: What makes a good game, and what makes a game good. Learning to Play: Playing to Learn

### Abstract

Jerome Bruner has helped to shape the notion of constructivism, which is of prime significance when looking at pedagogy in games and much of the learning that occurs in games is constructive. In one of his more recent works, "The Culture of Education" (1996), he discusses the importance of nine tenets to the development and maintenance of culture. Many of these touch on recurring themes in many discussions of games (Beavis, 1999; Kafai, 2001; Wolf & Perron, 2003). Bruner believes that "education is not an island, but part of the continent of culture." (1996, p11) The same can be said of games. Bruner's tenets guide such a 'psycho-cultural' approach to education and this paper will examine these tenets through the lens of game design.

*"The object of interpretation is understanding, not explanation."*

*"Understanding is the outcome of organizing and contextualizing essentially contestable, incompletely verifiable propositions in a disciplined way." p90*

## Introduction

Games are *already* doing it right (even if not deliberately).

deCastell, Gee, Jenkins, Jensen, Prensky, Squire ....

Gee, Jenkins, Prensky talk about how games teach – Gee has 36 principles, but does not, by and large, tie this to accepted pedagogy. Someone has to. Common comment from teachers and other educational professionals is that they never really looked at games this way before.

Part of larger body of work

Gagné (9 Events), Reigeluth (Elaboration), Merrill (1st Principles), Gardner (MI), Keirse (Meyers-Briggs), Felder (Index), Kolb (LS), Gregorc (System)

Someone needs to connect the dots.

Connecting good games to good pedagogy is one step in establishing feasibility of games as educational technology.

## Jerome Bruner

Jerome Bruner ranks among the foremost social thinkers of the last century. His contributions to psychology, cognitive science and education have been equaled by few.

Scaffolding, constructivism, narrative, culturalism

Interesting how many of these old guys are turning to the importance of culturalism & collective intelligence ("extelligence" (Stewart & Cohen, 1997) )

In his 1996 book "The Culture of Education", Dr. Bruner discusses education from a cultural anthropological perspective. An emphasis throughout the book on a culturalistic view of education in contrast with a computationalist view exposes an evolution of his theories and ideas about the role of cognitive psychology that includes an acknowledgement of the social and cultural context of learning. Included in this volume are nine 'tenets' for his psycho-cultural approach to education.

## Culturalism vs Computationalism

- Mind as cultural device
  - About meaning making
  - Education:
  - Culture provides tools for organizing what we know & learn
  - It's all situated / contextual
  - Symbolism / mimesis
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- Mind as computer (machine)
    - About organizing & utilization of material
  - Information processing
  - Education:
    - Reformulating theories
    - Computational optimization
    - Metacognition (redescription)

## Psych-Cultural Approach

- Offers alternative way to approach theory of education.
  - Agency, reflection, collaboration & culture
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- Extelligence
    - I.Stewart, J.Cohen, M.Donald, M.Tomasello

## Games are Cultural Objects

Juul, aarseth, murray,tl taylor

- Games are mimetic.
- Ideally suited to meaning making through culturalism.
- Look at Bruner's work through lens of games....

## **Bruner's Tenets....**

*Individual minds operating in an enabling culture.*

### **The Perspectival Tenet**

Making Meaning: One of the aspects of games that keep players involved with the same game for extended time is the ability to play it from different angles.

### **The Constraints Tenet**

People are constrained by human mental functioning and by semiotics. While other technologies facilitate role-playing, good games can place you in the virtual skin of someone you could not otherwise be – your choices and actions are largely constrained by the design of that character.

### **The Constructivism Tenet**

Reality is constructed and ascribed to the worlds we inhabit. In a game, your world is a virtual one. The realities that can be constructed can be both dream-like and fantastic, but also a hybrid of societies and relationships that exist partly in a gameworld, but anchored to real people, bolstered by real relationships and real sharing.

### **The Interactional Tenet**

Passing on knowledge involves a subcommunity in interaction. One has only to visit the website of *Apolyton University* (<http://apolyton.net/>) to see how strong this tenet is for some games.

### **The Externalization Tenet**

Externalization evidenced by the production of 'works' can produce and sustain group solidarity. Once again we turn to the Internet. Fan art and fan fiction thrives in the 'shadow' of a successful game.

### **The Instrumentalism Tenet**

Education has consequences that are instrumental in the lives of individuals. It is beginning to become clear, that there exist other consequences in the later lives of gamers, some of which appear to be quite promising (Beck & Wade, 2004).

### **The Institutional Tenet**

Education behaves as an institution. Although it would be nice to be able to report that neither game designers nor game communities follow this tenet, as it turns out, they sometimes do, which often evolve in a manner befitting the theme of the game.

### **The Tenet of Identity and Self-Esteem**

Agency and self-evaluation. Games are almost entirely dependent on agency.

## The Narrative Tenet

People make sense of the world and their place in it through logical-scientific thinking and narrative. Games do what they do through the use of narrative. Although many games require players to solve elaborate problems, it is primarily done within the context of a story.

## Conclusion

Existing game design & game culture is a good fit with Bruner's approach to education.

Further evidence: Good game design meshes with good educational design.

Games have potential to actualize some of Bruner's ideas on education.

## References

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